Commonwealth of Kentucky
Division for Air Quality

PERMIT STATEMENT OF BASIS

Title V Draft Permit No. V-03-053
HOLLEY PERFORMANCE PRODUCTS INC.
BOWLING GREEN, KENTUCKY
November 26, 2003
WILSON TAN, REVIEWER
Plant I.D. # 21-227-00008
Application Log # 50716 (F921)

SOURCE DESCRIPTION:

Holley Performance Products is a final machining and assembly facility for automotive engine components, with a major focus on carburetors and fuel pumps. Partially finished parts and raw materials are received at the Bowling Green KY facility where they undergo final machining, cleaning, chemical dying or plating, polishing, assembly, quality control testing, packaging for shipment and storage. These processes include:

- Final Machining – parts are heat treated and/or milled to meet assembly criteria;
- Chemical Dying or Plating – parts are run through numerous chemical cleaners and surface preparation solutions before a final chrome or dye coating is applied;
- Polishing – metal parts that have undergone machining, cleaning, and/or chemical dying/plating are polished to remove rough edges and to provide the necessary surface finish
- Assembly – manufactured components are assembled into final automotive components such as carburetors or fuel pumps;
- Quality Control Testing – assembled parts are bench tested to verify fuel flow characteristics and to verify that the parts are operating within specifications;
- Packaging – completed parts are packaged for shipment and consumer sales.

Holley also repairs and rebuilds carburetors. These units are received, disassembled, cleaned, repaired, reassembled, and quality control tested before being shipped to customers. There are a total of 11 stacks located at the plant.

Compliance Assurance Monitoring (CAM) does not apply because Holley Performance Products Inc. does not meet one of the criteria, which 'is subject to emission limitation and has a control device to meet that limit'. Holley Performance Product Inc. is major source for VOC and requested VOC emission limitation, but there is no control equipment to reduce VOC emissions in the plant.

Holley Performance Products Inc. process flow diagrams can be found in Attachment A.

COMMENTS:

1) Emission Point 01(17) – 29 Carburetors Tests Stands and 1 Masterflow Test Stand:
   i) The test stands are used to test new and reconditioned carburetors. Incidental testing is conducted throughout the facility on carburetors and other parts using mineral spirits.
   ii) A total of 45 Emission Test Stands (EMS) and 3 Masterflow Test Stands (MFTS) were approved in the revised O-89-076 permit. In the original Title V permit application, a total of 16 EMS and 1 MFTS were applied for. Holley Performance Products Inc. intends to move a similar operation from their plant in Springfield, TN to Bowling Green. The process is similar, except that they recondition rather than produce new carburetors. This move will install an additional 13 EMS to the 16 EMS applied for in the permit application.
   iii) Applicable regulations, requirements, limitations and descriptions have been incorporated in the permit.
   iv) All the EMS and MFTS are vented to the same stack #1.
   v) No control equipment.

2) Emission Point 02(1)) – Carbonitride Heat Treating:
   i) One Dow furnace is used to treat steel parts. This unit is a controlled atmosphere furnace that uses cracked natural gas to generate heat and an endothermic atmosphere. The cracked natural gas has a higher carbon monoxide concentration (approximately 20%) than regular natural gas. In addition, ammonia is used in this process to generate nitrogen (resulting in approximately 10% of the ammonia being emitted as NO_x).
   ii) Applicable regulations, requirements, limitations and descriptions have been incorporated in the permit.
   iii) This emission point is vented to stack #2.
   iv) No control equipment.

3) Emission Point 03(11) – Iso-Octane Fuel flow testing:
   i) Two units having a constant flow of iso-octane (2,2,4-Trimethylpentane) to perform QA/QC testing on various products.
   ii) Applicable regulations, requirements, limitations and descriptions have been incorporated in the permit.
   iii) This emission point is vented to stack #3.
   iv) No control equipment.

4) Emission Point 04(16) – Sludge Dehydration System:
   i) This system is used to dewater sludge from the wastewater treatment process prior to landfill disposal. 2 natural gas burners with a maximum rated capacity of 0.225

mmBTU/hr each are used to generate heat.

ii) Applicable regulations, requirements, limitations and descriptions have been incorporated in the permit.

iii) This emission point is vented to stack #4.

iv) Control equipment = Cyclone (85% efficiency) to control Particulate Matter (PM).

5) Emission Point 05(INS16, 20) – 2 Branson Ultrasonic Degreasers & 1 Aqueous Ultrasonic Cleaner:

i) The Branson Ultrasonic degreasers are used to clean parts in production, using non-halogenated solvents.

ii) The proposed Aqueous Ultrasonic Cleaner utilizes ultrasonic frequencies in conjunction with a phosphate based cleaner to clean castings and small parts.

iii) Applicable regulations, requirements, limitations and descriptions have been incorporated in the permit.

iv) No control equipment.

6) Emission Point 06[18(a,b,c,d,e,f)] – 6 Cold Cleaners:

i) The proposed cold cleaning units utilize un-heated liquid solvent to clean castings, parts, or completed carburetors. Non-halogenated solvents will be used.

ii) Applicable regulations, requirements, limitations and descriptions have been incorporated in the permit.

iii) There are 3 stacks associated with this emission points:
- 2 main tanks vented to stack #9.
- Supercharger tank vented to stack #10.
- Import area tank vented to stack #11.

iv) No control equipment.

7) Emission Point 07(12,13,14,15) – Plating Operations:

i) There are a total of 8 plating lines that emit through four exhaust points.
- Point 12 vented to stack #5.
- Point 13 vented to stack #6.
- Point 14 vented to stack #7.
- Point 15 vented to stack #8.

ii) Each line consists of a series of 5 to 15 tanks with cleaners, acids, dyes, rinse tanks, and plating baths depending on the preferred surface. Most of the plating is chemical plating. While chrome is present in some of the raw materials, no current is introduced into any of the baths that contain chrome. A series of plastic or metal parts are arranged on hangers and dipped into the appropriate series of baths, and for the duration of time specified in the formula for the individual coating. Parts are left dry after plating and before assembly.

iii) Applicable regulations, requirements, limitations and descriptions have been incorporated in the permit.

iv) Control Equipment:
- Point 12 has a scrubber (95% efficiency).

- Point 13 has an acid scrubber (95% efficiency).
- Point 14 has a Chromate/Zinc scrubber (95% efficiency).
- Point 15 has a scrubber (95% efficiency).

8) Insignificant Activities:

a. Boiler:
The majority of the facility is heated by a 1.8 mmBTU/hr natural gas-fired boiler/heat exhanger. The boiler has the ability to run on heating oil, however it is not equipped for this at the current time.

b. Space heaters:
There are 11 natural gas fired space heaters at the facility used to supply heat to the offices and portions of the production and assembly area.

c. Grinders:
There are seven grinders attached to a baghouse, rated to have 95% control efficiency. Operation of all seven grinders generates up to 1 cubic yard of metal shavings/particulates per year, assuming 4000 hours in a standard work year.

d. 8 Space heaters:
Eight natural gas fired space heaters ranging in size from 130,000 to 400,000 BTU/hr.

e. Fuel pump test stand:
This is a closed loop system used to test fuel pumps. No emissions anticipated.

f. Thermal Deburring:
There are 3 thermal deburring units located at the facility. The units use hydrogen, oxygen, and natural gas to create controlled explosions. This process is used to remove metal burrs from machined parts. All 3 units are vented to a dust collector and single roof vent.

g. Dow parts washer:
This parts washer is used to remove quench oil from parts after heat treating through the Dow carbonitride unit. The parts washer uses natural gas to generate heat and is vented through a roof vent. The unit utilizes an all-purpose cleaner.

h. 6 parts washers:
6 parts washers holding mineral spirits and each consists of an open basin with manual cover.

i. 7 Torex polishers:
The polishing compound is trickled into the water inlet of the polishers which drains to the wastewater treatment plant where the polishing compound ingredients are treated before discharge.

j. Strain drawing of metal parts:
Metal parts are heat treated in the strain drawing oven for strengthening after manufacture. The unit uses natural gas to generate heat and is vented through a roof vent.

k. Maintenance welding:
Welding operations are conducted in the maintenance area of the facility to repair equipment on an as-needed basis.

l. AR Industries Model S-4 shaker:
This unit shakes parts placed in a media to remove metal burrs, etc. A small amount of mineral spirits is sprayed onto the parts, collected and reused. Approximately 10 gallons is consumed per week.

m. 2 heated aqueous washers (proposed):
Used carburetor parts are placed into one of 2 batch operated, natural gas-fired parts washers that utilize an aqueous cleaner.

n. One 2-part foam process:
Completed carburetors are packaged in corrugated fiber boxes for shipment. A 2-part foam is used to fill the void space in the boxes to protect the carburetors.

o. 8 glass bead blasters:
Parts are further cleaned using one of 8 glass bead (or sand) blasting units. The beads are 'blasted' at the parts using pneumatic pressure which cleans the parts. The operation takes place within enclosed cabinets. Spent glass beads and displaced dirt, corrosion, etc. are filtered, collected in a control device, and disposed of.

p. 6 aqueous vibratory cleaners:
Castings and parts are cleaned utilizing batch operated vibratory cleaners that contain steel and ceramic media. A phosphate-based cleaner/water mixture is used as the cleaning compound. Parts are separated from the media, and processed. The spent water/cleaner mixture is processed in the on-site wastewater treatment system.

q. Silver soldering line:
Silver soldering is conducted on a conveyor using electric heat guns.

EMISSION AND OPERATING CAPS DESCRIPTION:

i) The source requested limitation on the VOC emissions to preclude PSD major source applicability.

ii) Plant-wide 12-month rolling average of Volatile Organic Compound (VOC) emissions shall not exceed 240 tons/yr, to preclude PSD major source applicability.

iii) Plant-wide 12-month rolling average of Sulfuric Acid emissions shall not exceed 2.23 lbs/hr and 4.46 tons/year. This limitation was included in the revised O-89-076 permit.

iv) Plant-wide 12-month rolling average of Sodium Hydroxide emissions shall not exceed 5.16 lbs/hr and 5.16 tons/year. This limitation was included in the revised O-89-076 permit.

v) Plant-wide 12-month rolling average of Zinc Oxide emissions shall not exceed 12.5 lbs/hr and 12.5 tons/year. This limitation was included in the revised O-89-076 permit.

vi) Plant-wide 12-month rolling average of Chromium III emission shall not exceed 0.251 lbs/hr and 0.777 tons/year. This limitation was included in the revised O-89-076 permit.

vii) The appropriate compliance demonstration methods for emission limitations and operating limitations have been incorporated in the permit.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part

52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has not incorporated these provisions in its air quality regulations.